

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1. (Cancelled)

Claim 2. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

the data for generation of probability is obtained by using data (n) and data (k) each generated on the basis of a random number obtained using said trigger signal as a start point to rotate the (n)-th random number from this random number using a rotating direction and a rotation length set on the basis of the data (k).

Claim 3. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

the data for generation of probability is obtained by using data (n) and data (j) each generated on the basis of a random number obtained using said trigger signal as a start point, to scramble the (n)-th and (j)-th random numbers from said random number.

Claim 4. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

the data for generation of probability is obtained by using data (n0) and data (j0) each generated on the basis of a random number obtained using said trigger signal as a start point, to generate data (n1, j1) and data (n2, j2) on the basis of the (n0)-th and (j0)-th random numbers from said random number, and using the data (n1, j1) and the data (n2, j2) as well as a rotating direction and a rotation length set on the basis of the data (n2, j2) to rotate the (n0+n1)-th and (j0+j1)-th random numbers from the random number obtained using the trigger signal as the start point, and scrambling the rotated (n0+n1)-th and (j0+j1)-th random numbers.

Claim 5. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

using data (n) and data (j) each generated on the basis of a random number obtained using said trigger signal as a start point, the (j)-th random number from this random number is set as the data for generation of probability, and said range data is obtained by comparing predetermined selection comparison data with the (n)-th data from said random number, selecting one of two sets of probability upper limit data and probability lower limit data in accordance with results of the comparison, and setting a range specified by the selected probability upper limit data and probability lower limit data, as the range data.

Claims 6-7. (Cancelled)

Claim 8. (Withdrawn) The probability generating apparatus according to claim 1, characterized in that random number data is obtained by using data (x) and data (y) each generated on the basis of the random number obtained using the trigger signal as the start point, to set, as the random number data, data obtained by using a rotating direction and a rotation length set on the basis of the data (y) to rotate the (x)-th random number from said random number, and the random number data is outputted together with said probability signal.

Claim 9. (Withdrawn) The probability generating apparatus according to claim 1, characterized in that random number data is obtained by using data (x) and data (y) each generated on the basis of the random number obtained using said trigger signal as the start point, to set, as the random number data, data obtained by scrambling the (x)-th and (y)-th random numbers from said random number, and the random number data is outputted together with said probability signal.

Claim 10. (Withdrawn) The probability generating apparatus according to claim 1, characterized in that the random number data is obtained by using data (x0) and data (y0) each generated on the basis of the random number obtained using said trigger signal as the start point, to generate data (x1, y1) and data (x2, y2) on the basis of the (x0)-th and (y0)-th random numbers from said random number, using the data (x1, y1) and the data (x2, y2) as well as a rotating direction and a rotation length set on the basis of the data (x2, y2) to rotate the (x0+x1)-th and (y0+y1)-th random numbers from the random number obtained using said trigger signal as the start point, and then scrambling the rotated (x0+x1)-th and (y0+y1)-th random numbers, and the random number data is outputted together with said probability signal.

Claim 11. (Cancelled)

Claim 12. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a start point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data having a probability lower limit value that can be varied within a probability setting range and probability upper limit data obtained by adding a predetermined probability width to the probability lower limit value.

Claim 13. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a start point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability upper limit data having a probability upper limit value that can be varied within a probability setting range and probability lower limit data obtained by subtracting a predetermined probability width from the probability upper limit value.

Claim 14. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a start point on the basis of the random numbers, the apparatus comparing the data for

generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data obtained by subtracting a predetermined probability width from a value for a probability generation position that can be varied within a probability setting range and probability upper limit data obtained by adding said probability width to said value for the probability generation position.

Claim 15. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said probability lower limit value is the random number obtained using said trigger signal as the start point.

Claim 16. (Withdrawn) The probability generating apparatus according to claim 13, characterized in that said probability upper limit value is the random number obtained using said trigger signal as the start point.

Claim 17. (Withdrawn) The probability generating apparatus according to claim 14, characterized in that said value for the probability generation position is the random number obtained using said trigger signal as the start point.

Claim 18. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that using the data (n) generated on the basis of the random number obtained using said trigger signal as the start point, the (n)-th random number from this random number is set as said probability lower limit value.

Claim 19. (Withdrawn) The probability generating apparatus according to claim 13, characterized in that using the data (n) generated on the basis of the random number obtained

using said trigger signal as the start point, the (n)-th random number from this random number is set as said probability upper limit value.

Claim 20. (Withdrawn) The probability generating apparatus according to claim 14, characterized in that using the data (n) generated on the basis of the random number obtained using said trigger signal as the start point, the (n)-th random number from this random number is set as the value for the probability generation position.

Claim 21. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said probability lower limit value is obtained by using the data (n) and data (k) each generated on the basis of the random number obtained using said trigger signal as the start point, to rotate the (n)-th random number from this random number using a rotating direction and a rotation length set on the basis of the data (k).

Claim 22. (Withdrawn) The probability generating apparatus according to claim 13, characterized in that said probability upper limit value is obtained by using the data (n) and data (k) each generated on the basis of the random number obtained using said trigger signal as the start point, to rotate the (n)-th random number from this random number set using a rotating direction and a rotation length set on the data (k).

Claim 23. (Withdrawn) The probability generating apparatus according to claim 14, characterized in that said value for the probability generation position is obtained by using the data (n) and data (k) each generated on the basis of the random number obtained using said trigger signal as the start point, to rotate the (n)-th random number from this random number using a rotating direction and a rotation length set on the data (k).

Claim 24. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said probability lower limit value is obtained by using the data (n) and data (j) each generated on the basis of the random number obtained using said trigger signal as the start point, to scramble the (n)-th and (j)-th random numbers from this random number.

Claim 25. (Withdrawn) The probability generating apparatus according to claim 13, characterized in that said probability upper limit value is obtained by using the data (n) and data (j) each generated on the basis of the random number obtained using the trigger signal as the start point, to scramble the (n)-th and (j)-th random numbers from this random number.

Claim 26. (Withdrawn) The probability generating apparatus according to claim 14, characterized in that said value for the probability generation position is obtained by using the data (n) and data (j) each generated on the basis of the random number obtained using said trigger signal as the start point, to scramble the (n)-th and (j)-th random numbers from this random number.

Claim 27. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said probability lower limit value is obtained by using the data (n0) and data (j0) each generated on the basis of the random number obtained using said trigger signal as the start point, to generate the data (n1, j1) and data (n2, j2) on the basis of the (n0)-th and (j0)-th random numbers from this random number, using the data (n1, j1) and the data (n2, j2) as well as the rotating direction and rotation length set on the basis of the data (n2, j2) to rotate the (n0+n1)-th and (j0+j1)-th random numbers from the random number obtained using the trigger signal as the start point, and then scrambling the rotated (n0+n1)-th and (j0+j1)-th random numbers.

Claim 28. (Withdrawn) The probability generating apparatus according to claim 13, characterized in that said probability upper limit value is obtained by using the data (n0) and data (j0) each generated on the basis of the random number obtained using said trigger signal as the start point, to generate the data (n1, j1) and data (n2, j2) on the basis of the (n0)-th and (j0)-th random numbers from this random number, using the data (n1, j1) and the data (n2, j2) as well as the rotating direction and rotation length set on the basis of the data (n2, j2) to rotate the (n0+n1)-th and (j0+j1)-th random numbers from the random number obtained using the trigger signal as the start point, and then scrambling the rotated (n0+n1)-th and (j0+j1)-th random numbers.

Claim 29. (Withdrawn) The probability generating apparatus according to claim 14, characterized in that said value for the probability generation position is obtained by using the data (n0) and data (j0) each generated on the basis of the random number obtained using said trigger signal as the start point, to generate the data (n1, j1) and data (n2, j2) on the basis of the (n0)-th and (j0)-th random numbers from the random number obtained using the trigger signal as the start point, using the data (n1, j1) and the data (n2, j2) as well as the rotating direction and rotation length set on the basis of the data (n2, j2) to rotate the (n0+n1)-th and (j0+j1)-th random numbers from the random number obtained using the trigger signal as the start point, and then scrambling the rotated (n0+n1)-th and (j0+j1)-th random numbers.

Claim 30. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said probability lower limit value, said probability upper limit value, and said value for the probability generation position are inverted or non-inverted in accordance with the contents of the random number obtained using said trigger signal as the start point.

Claim 31. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that if said probability width is moved and as a result, lies out of the probability

setting range, a part of the probability width which lies out of the probability setting range is moved to an opposite side of the probability setting range.

Claim 32. (Withdrawn) The probability generating apparatus according to claim 12, characterized in that said data for generation of probability is the data for generation of probability generated by the probability generating apparatus comprising a parallel random generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

using data (n) generated on the basis of a random number obtained using said trigger signal as a start point, the (n)-th random number from this random number is set as the data for generation of probability.

Claim 33. (Cancelled)

Claim 34. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data obtained by setting, as a value for a probability generation position, a random number obtained using the trigger signal as the start point and subtracting a product of a predetermined probability width and a probability

increase factor, from the value for the probability generation position, and probability upper limit data obtained by adding the product of said probability width and said probability increase factor, to said value for the probability generation position, and in that said probability increase factor increases from its initial value consistently with the number of consecutive losses in said probability signal and returns to the initial value when prizewinning occurs.

Claim 35. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data containing, as a probability lower limit value, a random number obtained using the trigger signal as the start point and probability upper limit data obtained by adding a product of a predetermined probability width and a probability increase factor, to the probability lower limit value, and in that said probability increase factor increases from its initial value consistently with the number of consecutive losses in said probability signal and returns to the initial value when prizewinning occurs.

Claim 36. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability upper limit data containing, as a probability upper limit value, a random number obtained using the trigger signal as the start point and

probability lower limit data obtained by subtracting a product of a predetermined probability width and a probability increase factor, from the probability upper limit value, and in that said probability increase factor increases from its initial value consistently with the number of consecutive losses in said probability signal and returns to the initial value when prizewinning occurs.

Claim 37. (Withdrawn) The probability generating apparatus according to claim 34, characterized by further comprising a probability increase factor generating circuit that outputs said probability increase factor on the basis of said trigger signal and said probability signal, the probability increase factor increasing in accordance with a predetermined pattern consistently with the number of consecutive losses.

Claim 38. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor generating circuit has a function of selecting and outputting one of a plurality of preset probability increase factor patterns in accordance with the contents of the random number obtained using said trigger signal as the base point.

Claim 39. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor increases linear-functionally at a uniform increase rate from beginning until prizewinning occurs.

Claim 40. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor increases step by step at a fixed increase rate at fixed intervals from beginning until prizewinning occurs.

Claim 41. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor is set at its initial value from beginning until a specified number of losses and subsequently increases linear-functionally at a uniform increase rate until prizewinning occurs.

Claim 42. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor is set at its initial value from beginning until a specified number of losses and is subsequently like one step and remains fixed at a high probability until prizewinning occurs.

Claim 43. (Withdrawn) The probability generating apparatus according to claim 37, characterized in that said probability increase factor is set at its initial value from beginning until a specified number of losses and subsequently increases step by step at a fixed increase rate at fixed intervals until prizewinning occurs.

Claim 44. (Withdrawn) The probability generating apparatus according to claim 34, characterized in that a probability increase amount is used in place of said probability increase factor, and data obtained by adding the probability increase amount to said probability width is used for a probability variation.

Claim 45. (Withdrawn) The probability generating apparatus according to claim 34, characterized in that if said trigger signal is not generated for a specified period of time, said probability increase factor or said probability increase amount is returned to its initial value.

Claim 46. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on

the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data obtained by setting, as a value for a probability generation position, a random number obtained using the trigger signal as a start point and subtracting a sum of a fluctuation width and a predetermined probability width, from the value for the probability generation position, and probability upper limit data obtained by adding the sum of said fluctuation width and said predetermined probability width, to said value for the probability generation position.

Claim 47. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data containing, as a probability lower limit value, a random number obtained using the trigger signal as a start point and probability upper limit data obtained by adding a sum of a fluctuation width and a predetermined probability width, to the probability lower limit value.

Claim 48. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the

apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability upper limit data containing, as a probability upper limit value, a random number obtained using the trigger signal as a start point and probability lower limit data obtained by subtracting a sum of a fluctuation width and a predetermined probability width, from the probability upper limit value.

Claim 49. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data obtained by setting, as a value for a probability generation position, a random number obtained using the trigger signal as a start point and subtracting a product of a predetermined probability width and a fluctuation rate, from the value for the probability generation position, and probability upper limit data obtained by adding the product of said probability width and said fluctuation rate, to said value for the probability generation position.

Claim 50. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability lower limit data containing, as a probability lower limit value, a random number obtained using the trigger signal as a start point and probability upper limit data obtained by adding a product of a predetermined probability width and a fluctuation rate, to the probability lower limit value.

Claim 51. (Withdrawn) A probability generating apparatus comprising a parallel random number generator offering uniformity and consecutively generating random numbers on the basis of a synchronous signal, the apparatus setting, as data for generation of probability, data generated using a trigger signal as a base point on the basis of the random numbers, the apparatus comparing the data for generation of probability with range data to output a win/loss probability signal, the apparatus being characterized in that:

said range data is specified by probability upper limit data containing, as a probability upper limit value, a random number obtained using the trigger signal as a start point and probability lower limit data obtained by subtracting a product of a predetermined probability width and a fluctuation rate, from the probability upper limit value.

Claim 52. (Withdrawn) The probability generating apparatus according to claim 46, characterized by further comprising a fluctuation waveform generating circuit that outputs said fluctuation width or said fluctuation rate as a fluctuation waveform based on a time based on said synchronous signal.

Claim 53. (Withdrawn) The probability generating apparatus according to claim 46, characterized by further comprising a fluctuation waveform generating circuit that outputs said fluctuation width or said fluctuation rate as a fluctuation waveform based on the number of trigger signals.

Claim 54. (Withdrawn) The probability generating apparatus according to claim 46, characterized by further comprising a fluctuation waveform generating circuit that outputs said fluctuation width or said fluctuation rate as a fluctuation waveform based on a time based on said synchronous signal or as a fluctuation waveform based on the number of trigger signals, depending on contents of the random number obtained using said trigger signal as the base point.

Claim 55. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said fluctuation waveform generating circuit has a function of multiplying a time used as a base unit of a fluctuation time axis or the number of trigger signals by a predetermined factor, depending on the contents of the random number obtained using said trigger signal as the base point.

Claim 56. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said fluctuation waveform generating circuit has a function of moving a phase of said fluctuation cycle a predetermined amount in accordance with the contents of the random number obtained using said trigger signal as the base point.

Claim 57. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said fluctuation waveform generating circuit has a function of selecting one of a plurality of preset fluctuation waveforms in accordance with the contents of the random number obtained using said trigger signal as the base point.

Claim 58. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said fluctuation waveform generating circuit has a function of inverting or non-inverting said fluctuation waveform depending on the contents of the random number obtained using said trigger signal as the base point.

Claim 59. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said waveform generating circuit generates a fluctuation waveform under new fluctuation conditions set for each fluctuation cycle on the basis of the contents of the random number obtained using said trigger signal as the base point.

Claim 60. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a sine wave or a cosine wave or a waveform obtained by deforming the sine or cosine wave.

Claim 61. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a square wave or a waveform obtained by deforming the square wave.

Claim 62. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a triangular wave or a waveform obtained by deforming the triangular wave.

Claim 63. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a saw-tooth-wave or a waveform obtained by deforming the saw-tooth-wave.

Claim 64. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a trapezoidal wave or a waveform obtained by deforming the trapezoidal wave.

Claim 65. (Withdrawn) The probability generating apparatus according to claim 52 is characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a normal distribution waveform or a deformed normal distribution wave.

Claim 66. (Withdrawn) The probability generating apparatus according to claim 52 is characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a parabolic waveform or a deformed parabolic wave.

Claim 67. (Withdrawn) The probability generating apparatus according to claim 52 is characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is a cubic root waveform or a deformed cubic root waveform.

Claim 68. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that a fluctuation waveform generated by said fluctuation waveform generating circuit is an attenuating vibration waveform, an amplifying vibration waveform, or a deformed attenuating or amplifying vibration waveform.

Claim 69. (Withdrawn) The probability generating apparatus according to claim 52, characterized by further comprising a plurality of said fluctuation waveform generating circuits and a synthesizer that synthesizes fluctuation waveforms generated by the fluctuation waveform generating circuits, and in that a synthesized output from the synthesizer is said fluctuation width or said fluctuation rate.

Claim 70. (Withdrawn) The probability generating apparatus according to claim 52, characterized in that said fluctuation waveform generating circuit has a ROM that stores fluctuation waveform data or a RAM that stores fluctuation waveform data.

Claim 71. (Withdrawn) The probability generating apparatus according to claim 46, characterized in that using data generated on the basis of the random number obtained using said trigger signal as the base point, a random number used to generate said range data is set as a random number corresponding to a timing obtained by adding an offset value based on said data to a timing for the generation of the random number obtained using said trigger signal as the base point.

Claim 72. (Withdrawn) The probability generating apparatus according to Claim 46, characterized in that a random number used to generate the range data is obtained by using data generated on the basis of the random number obtained using said trigger signal as the base point, to rotate, on the basis of this data, a random number corresponding to a timing obtained by adding an offset value based on said data to a timing for the generation of the random number obtained using the trigger signal as the base point.

Claim 73. (Withdrawn) The probability generating apparatus according to claim 46, characterized in that a random number used to generate the range data is obtained by using data generated on the basis of the random number obtained using said trigger signal as the base point as well as a plurality of data generated on the basis of this random number, to scramble a random number corresponding to a timing obtained by adding an offset value based on said data to a timing for the generation of the random number obtained using the trigger signal as the base point.

Claim 74. (Withdrawn) The probability generating apparatus according to claim 46, characterized in that a random number used to generate the range data is obtained by using data generated on the basis of the random number obtained using said trigger signal as the base point as well as a plurality of data generated on the basis of this random number, to rotate and scramble a random number corresponding to a timing obtained by adding an offset value based on the said data to a timing for the generation of the random number obtained using the trigger signal as the base point.

Claim 75. (Withdrawn) The probability generating apparatus according to claim 46, characterized in that the random number obtained using said trigger signal as the base point corresponds to a timing for generation of the trigger signal or a timing obtained by adding a preset fixed or variable offset value to the timing for the generation of the trigger signal.

Claim 76. (New) A probability generating apparatus **(1)** comprising:
a parallel random number generator **(2)** configured and dimensioned for offering uniformity of random numbers (RN), the parallel random number generator **(2)** generating random numbers in synchronization with a synchronous signal (SS), each of the random numbers generated being composed of consecutive n bits RN (0) to RN (n-1);
a register **(4)** having a first register portion **(4a)** and a second register portion **(4b)**;
a counter **(7)**;
a shift register **(5)**;
a control circuit **(3)** configured and dimensioned for utilizing predetermined bits of set data (k) in register **(4)** to determine direction and speed of rotation of data and for utilizing timing t(n) to control shift direction and number of random number data set in the shift register **(5)**; and
a comparator **(6)** having a first comparator portion **(6a)** and a second comparator portion **(6b)**;

the first comparator portion (**6a**) configured and dimensioned to compare a set data value (n) in the first register portion (**4a**) with a count in the counter (7), in which matching comparison output operates as a trigger signal (TS) to set a random number for generation of probability in the second register portion (**4b**), thereby generating data for generation of probability,

the second comparator portion (**6b**) configured and dimensioned to compare the data for generation of probability with range data, the range data including probability lower limit data (DL) and probability upper limit data (DU), in which comparison output obtained is a probability signal (PS),

whereby data for generation of probability is the random number (RN) at a time $t(n)$ after $t(0)$ the trigger signal is generated, the data varying every time the trigger signal (TS) is generated and is indeterminate.

Claim 77. (New) The probability generating apparatus according to claim 76, in which the apparatus is configured and dimensioned to generate data for generation of probability by inverting or non-inverting data in accordance with the random number obtained using the trigger signal (TS) as a start point.

Claim 78. (New) The probability generating apparatus according to claim 76, in which the apparatus is configured and dimensioned to obtain the random number data by utilizing data (x) generated on a basis of the random number obtained using the trigger signal (TS) as a start point to set an (x)-th random number from this random number as the random number data and to output the random number data together with the probability signal (PS).

Claim 79. (New) The probability generating apparatus according to claim 76, in which the apparatus is configured and dimensioned to time generation of the trigger signal (TS), wherein timing for generation the trigger signal (TS) is obtained by adding a preset variable offset value to a timing for generating said trigger signal (TS).

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Claim 80. (New) The probability generating apparatus according to claim 76, wherein the parallel random generator (2) includes a 1-bit serial random number generator and a register circuit configured and dimensioned to retain predetermined bit lengths of serial random numbers generated and to output the serial random numbers in parallel.